

SEQUENCE LISTING

<110> Vivien Chan et al.

<120> NOTCH RECEPTOR LIGANDS AND USES THEREOF

<130> PPO-1602.002 / 200130.498

<140> US 09/641,612

<141> 2000-08-17

<160> 10

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1752

<212> DNA

<213> Homo sapiens

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ccaggccctg gggcccccgcg tccccctgc agcggccgc tccccctggc cctcttcttc	180
agagtctgcc tgaagcctgg gctctcagag gaggccgcg agtccccgtg cgcctggc	240
gcggcgctga gtgcgcgcgg accggctac accgagcagc cggagcgc cgcgcctgat	300
ctcccaactgc ccgacggct cttgcagtg ccctccggg acgcctggc tggcaccttc	360
tctttcatca tcgaaacctg gagagaggag ttaggagacc agattggagg gcccgcctgg	420
agcctgctgg cgccgcgtggc tggcaggcg cgcttggcag cggaggccc gtggggcccg	480
gacattcagc ggcaggcgc ctggagactg cgctgctgt accgcgcgcg ctgcgagccg	540
cctgcggctcg ggaccgcgtg cacgcgcctc tgccgtccgc gcagcgc ctcgcgtgc	600
ggtcggggac tgcgcgcctg cgccgcgc tggacgaat cggtgtggc agcaggctgc	660
agccctgagc atggcttctg tgaacacgccc ggtgaatgcc gatgcctaga gggtggact	720
ggaccgcctgc acacggtccc tgcgcgcctc agcagctgc tcagccccag gggccgc	780
tctgctacca ccggatgcct tgcgcgcctc cctggccct gtgacggaa cccgtgtgcc	840
aatggaggca gctgttagtga gacacccagg tccttgaat gcacctggc gcgtgggttc	900
tacgggctgc ggtgtgaggt gagcgggggtg acatgtgcag atggaccctg cttcaacggc	960
ggcttggcgtg tcgggggtgc agaccctgac tctgcctaca tctgcactg cccacctgg	1020
ttccaaggct ccaactgtga gaagagggtg gaccgggtca gcctgcagcc atggcgaat	1080
ggcggactct gcctggaccc gggccaccc ctgcgcgtcc gctgccgc cggcttcgc	1140
ggtcctcgct ggcggcgcga cctggacac tgcgcggcc gcgcctgc taacggcgc	1200
acgtgtgtgg agggcggcg cgcgcaccgc tgctctgcg cgctggcgtt cggggccgc	1260
gactgccgcg agcgcgcggc cccgtgcgc ggcgcgcct gtgtcacgg cggccgtgc	1320
tacgcgcact tctccggcct cgtctgcgt tgctgcgc tgcgcgcct gctacatggg agcgcgggtgt	1380
gagttccccag tgcaccccgaa cggcgcgaagc gcctggccc cggccccc gggctcagg	1440
cccggggacc ctacgcgcta cctttgcct cggcgtctgg gactgctcg ggcgcgggc	1500
gtggccggcg ctgcgcctt gctggccac gtgcgcgc gtcggccactc ccaggatgt	1560
gggtctcgct tgctggctgg gaccccgag cctgcgtcc acgcactccc ggtgcactc	1620
aacaacctaa ggacgcagga ggttccggg gatggtccga gtcgtccgt agattggat	1680
cgccctgaag atgtagaccc tcaaggatt tatgtcatat ctgcgccttc catctacgt	1740
cgggaggcgt ga	1752

<210> 2
<211> 583
<212> PRT
<213> Homo sapiens

<400> 2
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Ala Leu Ile Phe Leu Pro Gln Thr Arg Pro Ala Gly Val Phe Glu Leu
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Gln Ile His Ser Phe Gly Pro Gly Pro Gly Ala Pro Arg Ser
35 40 45
Pro Cys Ser Ala Arg Leu Pro Cys Arg Leu Phe Phe Arg Val Cys Leu
50 55 60
Lys Pro Gly Leu Ser Glu Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly
65 70 75 80
Ala Ala Leu Ser Ala Arg Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala
85 90 95
Pro Ala Pro Asp Leu Pro Leu Pro Asp Gly Leu Leu Gln Val Pro Phe
100 105 110
Arg Asp Ala Trp Pro Gly Thr Phe Ser Phe Ile Ile Glu Thr Trp Arg
115 120 125
Glu Glu Leu Gly Asp Gln Ile Gly Gly Pro Ala Trp Ser Leu Leu Ala
130 135 140
Arg Val Ala Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg
145 150 155 160
Asp Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Cys Ser Tyr Arg Ala
165 170 175
Arg Cys Glu Pro Pro Ala Val Gly Thr Ala Cys Thr Arg Leu Cys Arg
180 185 190
Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala
195 200 205
Pro Leu Glu Asp Glu Ser Val Cys Arg Ala Gly Cys Ser Pro Glu His
210 215 220
Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu Glu Gly Trp Thr
225 230 235 240
Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser Cys Leu Ser Pro
245 250 255
Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val Pro Gly Pro Gly
260 265 270
Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser Cys Ser Glu Thr
275 280 285
Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe Tyr Gly Leu Arg
290 295 300
Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly
305 310 315 320
Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala Tyr Ile Cys His
325 330 335
Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys Arg Val Asp Arg
340 345 350
Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys Leu Asp Leu Gly
355 360 365
His Ala Leu Arg Cys Arg Cys Arg Ala Gly Phe Ala Gly Pro Arg Cys
370 375 380

Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys Ala Asn Gly Gly
 385 390 395 400
 Thr Cys Val Glu Gly Gly Ala His Arg Cys Ser Cys Ala Leu Gly
 405 410 415
 Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro Cys Ala Ala Arg
 420 425 430
 Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe Ser Gly Leu Val
 435 440 445
 Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys Glu Phe Pro Val
 450 455 460
 His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro Pro Gly Leu Arg
 465 470 475 480
 Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala Leu Gly Leu Leu
 485 490 495
 Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu Val His Val Arg
 500 505 510
 Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu Leu Ala Gly Thr
 515 520 525
 Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu Asn Asn Leu Arg
 530 535 540
 Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser Ser Val Asp Trp Asn
 545 550 555 560
 Arg Pro Glu Asp Val Asp Pro Gln Gly Ile Tyr Val Ile Ser Ala Pro
 565 570 575
 Ser Ile Tyr Ala Arg Glu Ala
 580

<210> 3

<211> 1307

<212> DNA

<213> Homo sapiens

<400> 3

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gcaaccctgg	ctggaaaggg	ccctactgca	cagagcgtga	gtctctggga	aggcacccgt	180
ggctcactcg	tccacgaaca	cggaccacgc	gcagggacgg	ggcttcctga	gccacggggg	240
gcttgggact	gttagatgt	tctggtgggg	aaactgaggc	ccagaggaca	gaagtggatt	300
gctataagt	acagtcgtc	agtggggggg	ttggggtcaa	cgcagacatt	ttaacatccc	360
aggctgttt	tatccactat	cggaactgcc	tttcttaatc	agggaggatt	ttagagacag	420
ggccagggtt	caggaagtaa	agccagtgt	accccccagg	tgtgtgtatt	agagagggag	480
aggaggaagg	aaggaggaa	cacagagaga	gcttgtgtgt	caggggcacc	atttcaaccc	540
gagttcccag	tgcttgaaca	gcatcacact	ggaaaacgtt	ccattttctc	tctggagctg	600
gtgtgtttga	cctctcttgg	gcaaaccgcct	ttccggatac	tccctgtgac	acgcactgtc	660
tatgtggcc	agagagcagg	ctttcactcc	tgtggcgtgc	tgaggccagg	tctccaaggc	720
ctgtgtggc	gaggggtgca	cagccccgtc	tggcttgaat	gctcaggcag	cacttgtct	780
gaaaaagcaa	tgtttccca	atagtgcac	aggctctacc	tgcctcttat	tagtattga	840
tgtgtcaatg	tcatggcagg	caggtgacta	ggcagggtt	ggggccgtgc	tggctcctgg	900
ttctggctca	tggggacctc	aggagccctc	tctccagctg	actgaggcct	cgccctgcacg	960
cctggccgtc	ccagcccatt	ggtaccggat	ttctctacag	ctggggattt	ggttaggtcct	1020
ggagctgccc	agaaaactcca	gggaactgtc	atttccttc	cttggaaactg	gacaaccttg	1080
gagaggggct	ctgggaggcc	cagaacctt	ggcaggagct	ggtagtgcc	tgggttgag	1140
gttgggtctt	cccattcaact	gagtgcctt	atgccttgc	tccttagctt	cccaaattcc	1200
ctccggaaact	tactgagctc	tttcttaagct	ttgccttgc	ctgaactgtt	tctggggaaa	1260

aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaaaa aaaaaaaaa

1307

<210> 4

<211> 81

<212> PRT

<213> Homo sapiens

<400> 4

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Tyr Tyr Gly Glu Gly Cys Ser Val Phe Cys Arg Pro Arg Asp Asp Ala
 20 25 30

Phe Gly His Phe Thr Cys Gly Glu Arg Gly Glu Lys Val Cys Asn Pro
 35 40 45

Gly Trp Lys Gly Pro Tyr Cys Thr Glu Arg Glu Ser Leu Gly Arg His
 50 55 60

Arg Trp Leu Thr Arg Pro Arg Thr Arg Thr Arg Arg Asp Gly Ala
 65 70 75 80

Ser

<210> 5

<211> 585

<212> PRT

<213> Mus musculus

<220>

<221> VARIANT

<222> (1)...(585)

<223> Xaa = Any Amino Acid

<400> 5

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Phe Leu Leu Pro Gln Ala Leu Pro Ala Gly Val Phe Glu Leu Gln Ile
 20 25 30

His Ser Phe Gly Pro Gly Pro Gly Leu Gly Thr Pro Arg Ser Pro Cys
 35 40 45

Asn Ala Arg Gly Pro Cys Arg Leu Phe Phe Arg Val Cys Leu Lys Pro
 50 55 60

Gly Val Ser Gln Glu Ala Thr Glu Ser Leu Cys Ala Leu Gly Ala Ala
 65 70 75 80

Leu Ser Thr Ser Val Pro Val Tyr Thr Glu His Pro Gly Glu Ser Ala
 85 90 95

Ala Ala Leu Pro Leu Pro Asp Gly Leu Val Arg Val Pro Phe Arg Asp
 100 105 110

Ala Trp Pro Gly Thr Phe Ser Leu Val Ile Glu Thr Trp Arg Glu Gln
 115 120 125

Leu Gly Glu His Ala Gly Gly Pro Ala Trp Asn Leu Leu Ala Arg Val
 130 135 140

Val Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg Asp Val
 145 150 155 160

Gln Arg Thr Gly Thr Trp Glu Leu His Phe Ser Tyr Arg Ala Arg Cys
 165 170 175

Glu Pro Pro Ala Val Gly Ala Ala Cys Ala Arg Leu Cys Arg Ser Arg
 180 185 190
 Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Thr Pro Phe
 195 200 205
 Pro Asp Glu Cys Glu Ala Pro Ser Val Cys Arg Pro Gly Cys Ser Pro
 210 215 220
 Glu His Gly Tyr Cys Glu Glu Pro Asp Glu Cys Arg Cys Leu Glu Gly
 225 230 235 240
 Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser Cys Leu
 245 250 255
 Asn Ser Arg Val Pro Gly Pro Ala Ser Thr Gly Cys Leu Leu Pro Gly
 260 265 270
 Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser Cys Ser
 275 280 285
 Glu Thr Ser Gly Ser Phe Glu Cys Ala Cys Pro Arg Gly Phe Tyr Gly
 290 295 300
 Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro Cys Phe
 305 310 315 320
 Asn Gly Gly Leu Cys Val Gly Gly Glu Asp Pro Asp Ser Xaa Tyr Val
 325 330 335
 Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys Arg Val
 340 345 350
 Asp Arg Cys Ser Leu Gln Pro Cys Gln Asn Gly Gly Leu Cys Leu Asp
 355 360 365
 Leu Gly His Ala Xaa Xaa Cys Arg Cys Arg Ala Gly Phe Ala Gly Pro
 370 375 380
 Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys Ala Asn
 385 390 395 400
 Ala Gly Thr Cys Val Glu Gly Gly Ser Arg Arg Cys Ser Cys Ala
 405 410 415
 Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro Cys Ala
 420 425 430
 Ser Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe Ser Gly
 435 440 445
 Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Val Arg Cys Glu Phe
 450 455 460
 Ala Val Arg Pro Asp Gly Ala Asp Ala Val Pro Ala Ala Pro Arg Gly
 465 470 475 480
 Leu Arg Gln Ala Asp Pro Gln Arg Phe Leu Leu Pro Pro Ala Leu Gly
 485 490 495
 Leu Leu Val Ala Ala Gly Leu Ala Gly Ala Ala Leu Leu Val Ile His
 500 505 510
 Val Arg Arg Arg Gly Pro Gly Gln Asp Thr Gly Thr Arg Leu Leu Ser
 515 520 525
 Gly Thr Arg Glu Pro Ser Val His Thr Leu Pro Asp Ala Leu Asn Asn
 530 535 540
 Leu Arg Leu Gln Asp Gly Ala Gly Asp Gly Pro Ser Ser Ser Ala Asp
 545 550 555 560
 Trp Asn His Pro Glu Asp Gly Asp Ser Arg Ser Ile Tyr Val Ile Pro
 565 570 575
 Ala Pro Ser Ile Tyr Ala Arg Glu Ala
 580 585

<211> 723
<212> PRT
<213> Homo sapiens

<400> 6

Met	Gly	Ser	Arg	Cys	Ala	Leu	Ala	Leu	Ala	Val	Leu	Ser	Ala	Leu	Leu
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Cys	Gln	Val	Trp	Ser	Ser	Gly	Val	Phe	Glu	Leu	Lys	Leu	Gln	Glu	Phe
						20			25				30		
Val	Asn	Lys	Lys	Gly	Leu	Leu	Gly	Asn	Pro	Asn	Cys	Cys	Arg	Gly	Gly
					35			40			45				
Ala	Gly	Pro	Pro	Pro	Cys	Ala	Cys	Arg	Thr	Phe	Phe	Arg	Val	Cys	Leu
						50			55			60			
Lys	His	Tyr	Gln	Ala	Ser	Val	Ser	Pro	Glu	Pro	Pro	Cys	Thr	Tyr	Gly
						65			70			75			80
Ser	Ala	Val	Thr	Pro	Val	Leu	Gly	Val	Asp	Ser	Phe	Ser	Leu	Pro	Asp
						85			90			95			
Gly	Gly	Gly	Ala	Asp	Ser	Ala	Phe	Ser	Asn	Pro	Ile	Arg	Phe	Pro	Phe
						100			105			110			
Gly	Phe	Thr	Trp	Pro	Gly	Thr	Phe	Ser	Leu	Ile	Ile	Glu	Ala	Leu	His
						115			120			125			
Thr	Asp	Ser	Pro	Asp	Asp	Leu	Ala	Thr	Glu	Asn	Pro	Glu	Arg	Leu	Ile
						130			135			140			
Ser	Pro	Leu	Ala	Thr	Gln	Arg	His	Leu	Thr	Val	Gly	Glu	Glu	Trp	Ser
						145			150			155			160
Gln	Asp	Leu	His	Ser	Ser	Gly	Arg	Thr	Asp	Leu	Lys	Tyr	Ser	Tyr	Arg
						165			170			175			
Phe	Val	Cys	Asp	Glu	His	Tyr	Tyr	Gly	Glu	Gly	Cys	Ser	Val	Phe	Cys
						180			185			190			
Arg	Pro	Arg	Asp	Asp	Ala	Phe	Gly	His	Phe	Thr	Cys	Gly	Glu	Arg	Gly
						195			200			205			
Glu	Lys	Val	Cys	Asn	Pro	Gly	Trp	Lys	Gly	Pro	Tyr	Cys	Thr	Glu	Pro
						210			215			220			
Ile	Cys	Leu	Pro	Gly	Cys	Asp	Glu	Gln	His	Gly	Phe	Cys	Asp	Lys	Pro
						225			230			235			240
Gly	Glu	Cys	Lys	Cys	Arg	Val	Gly	Trp	Gln	Gly	Arg	Tyr	Cys	Asp	Glu
						245			250			255			
Cys	Ile	Arg	Tyr	Pro	Gly	Cys	Leu	His	Gly	Thr	Cys	Gln	Gln	Pro	Trp
						260			265			270			
Gln	Cys	Asn	Cys	Gln	Glu	Gly	Trp	Gly	Gly	Leu	Phe	Cys	Asn	Gln	Asp
						275			280			285			
Leu	Asn	Tyr	Cys	Thr	His	His	Lys	Pro	Cys	Lys	Asn	Gly	Ala	Thr	Cys
						290			295			300			
Thr	Asn	Thr	Gly	Gln	Gly	Ser	Tyr	Thr	Cys	Ser	Cys	Arg	Pro	Gly	Tyr
						305			310			315			320
Thr	Gly	Ala	Thr	Cys	Glu	Leu	Gly	Ile	Asp	Glu	Cys	Asp	Pro	Ser	Pro
						325			330			335			
Cys	Lys	Asn	Gly	Gly	Ser	Cys	Thr	Asp	Leu	Glu	Asn	Ser	Tyr	Ser	Cys
						340			345			350			
Thr	Cys	Pro	Pro	Gly	Phe	Tyr	Gly	Lys	Ile	Cys	Glu	Leu	Ser	Ala	Met
						355			360			365			
Thr	Cys	Ala	Asp	Gly	Pro	Cys	Phe	Asn	Gly	Gly	Arg	Cys	Ser	Asp	Ser
						370			375			380			
Pro	Asp	Gly	Gly	Tyr	Ser	Cys	Arg	Cys	Pro	Val	Gly	Tyr	Ser	Gly	Phe

385	390	395	400
Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn			
405	410	415	
Gly Ala Lys Cys Val Asp Leu Gly Asp Ala Tyr Leu Cys Arg Cys Gln			
420	425	430	
Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asn Val Asp Asp Cys Ala			
435	440	445	
Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp			
450	455	460	
Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala			
465	470	475	480
Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys			
485	490	495	
His Glu Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Gly Tyr Gly			
500	505	510	
Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala			
515	520	525	
Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro			
530	535	540	
Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu Leu			
545	550	555	560
Gly Cys Ala Ala Val Val Val Cys Val Pro Leu Arg Leu Gln Lys His			
565	570	575	
Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn			
580	585	590	
Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly			
595	600	605	
Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp			
610	615	620	
His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp			
625	630	635	640
Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp			
645	650	655	
Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly			
660	665	670	
Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu			
675	680	685	
Arg Lys Arg Pro Asp Ser Gly Cys Ser Thr Ser Lys Asp Thr Lys Tyr			
690	695	700	
Gln Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Val Ile Ala			
705	710	715	720
Thr Glu Val			

<210> 7
<211> 685
<212> PRT
<213> Homo sapiens

<400> 7
Met Ala Ala Ala Ser Arg Ser Ala Ser Gly Trp Ala Leu Leu Leu
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Val Ala Leu Trp Gln Gln Arg Ala Ala Gly Ser Gly Val Phe Gin Leu
20 25 30

Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala Ser Gly Arg
 35 40 45
 Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val Cys Leu Lys His
 50 55 60
 Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr Phe Gly Thr Val Ser
 65 70 75 80
 Thr Pro Val Leu Gly Thr Asn Ser Phe Ala Val Arg Asp Asp Ser Ser
 85 90 95
 Gly Gly Gly Arg Asn Pro Leu Gln Leu Pro Phe Asn Phe Thr Trp Pro
 100 105 110
 Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp His Ala Pro Gly Asp Asp
 115 120 125
 Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala Leu Ile Ser Lys Ile Ala
 130 135 140
 Ile Gln Gly Ser Leu Ala Val Gly Gln Asn Trp Leu Leu Asp Glu Gln
 145 150 155 160
 Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser Tyr Arg Val Ile Cys Ser
 165 170 175
 Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg Leu Cys Lys Lys Arg Asn
 180 185 190
 Asp His Phe Gly His Tyr Val Cys Gln Pro Asp Gly Asn Leu Ser Cys
 195 200 205
 Leu Pro Gly Trp Thr Gly Glu Tyr Cys Gln Gln Pro Ile Cys Leu Ser
 210 215 220
 Gly Cys His Glu Gln Asn Gly Tyr Cys Ser Lys Pro Ala Glu Cys Leu
 225 230 235 240
 Cys Arg Pro Gly Trp Gln Gly Arg Leu Cys Asn Glu Cys Ile Pro His
 245 250 255
 Asn Gly Cys Arg His Gly Thr Cys Ser Thr Pro Trp Gln Cys Thr Cys
 260 265 270
 Asp Glu Gly Trp Gly Gly Leu Phe Cys Asp Gln Asp Leu Asn Tyr Cys
 275 280 285
 Thr His His Ser Pro Cys Lys Asn Gly Ala Thr Cys Ser Asn Ser Gly
 290 295 300
 Gln Arg Ser Tyr Thr Cys Thr Cys Arg Pro Gly Tyr Thr Gly Val Asp
 305 310 315 320
 Cys Glu Leu Glu Leu Ser Glu Cys Asp Ser Asn Pro Cys Arg Asn Gly
 325 330 335
 Gly Ser Cys Lys Asp Gln Glu Asp Gly Tyr His Cys Leu Cys Pro Pro
 340 345 350
 Gly Tyr Tyr Gly Leu His Cys Glu His Ser Thr Leu Ser Cys Ala Asp
 355 360 365
 Ser Pro Cys Phe Asn Gly Gly Ser Cys Arg Glu Arg Asn Gln Gly Ala
 370 375 380
 Asn Tyr Ala Cys Glu Cys Pro Pro Asn Phe Thr Gly Ser Asn Cys Glu
 385 390 395 400
 Lys Lys Val Asp Arg Cys Thr Ser Asn Pro Cys Ala Asn Gly Gln
 405 410 415
 Cys Leu Asn Arg Gly Pro Ser Arg Met Cys Arg Cys Arg Pro Gly Phe
 420 425 430
 Thr Gly Thr Tyr Cys Glu Leu His Val Ser Asp Cys Ala Arg Asn Pro
 435 440 445
 Cys Ala His Gly Gly Thr Cys His Asp Leu Glu Asn Gly Leu Met Cys
 450 455 460

Thr Cys Pro Ala Gly Phe Ser Gly Arg Arg Cys Glu Val Arg Thr Ser
 465 470 475 480
 Ile Asp Ala Cys Ala Ser Ser Pro Cys Phe Asn Arg Ala Thr Cys Tyr
 485 490 495
 Thr Asp Leu Ser Thr Asp Thr Phe Val Cys Asn Cys Pro Tyr Gly Phe
 500 505 510
 Val Gly Ser Arg Cys Glu Phe Pro Val Gly Leu Pro Pro Ser Phe Pro
 515 520 525
 Trp Val Ala Val Ser Leu Gly Val Gly Leu Ala Val Leu Leu Val Leu
 530 535 540
 Leu Gly Met Val Ala Val Ala Val Arg Gln Leu Arg Leu Arg Arg Pro
 545 550 555 560
 Asp Asp Gly Ser Arg Glu Ala Met Asn Asn Leu Ser Asp Phe Gln Lys
 565 570 575
 Asp Asn Leu Ile Pro Ala Ala Gln Leu Lys Asn Thr Asn Gln Lys Lys
 580 585 590
 Glu Leu Glu Val Asp Cys Gly Leu Asp Lys Ser Asn Cys Gly Lys Gln
 595 600 605
 Gln Asn His Thr Leu Asp Tyr Asn Leu Ala Pro Gly Pro Leu Gly Arg
 610 615 620
 Gly Thr Met Pro Gly Lys Phe Pro His Ser Asp Lys Ser Leu Gly Glu
 625 630 635 640
 Lys Ala Pro Leu Arg Leu His Ser Glu Lys Pro Glu Cys Arg Ile Ser
 645 650 655
 Ala Met Cys Ser Pro Arg Asp Ser Met Tyr Gln Ser Val Cys Leu Ile
 660 665 670
 Ser Glu Glu Arg Asn Glu Cys Val Ile Ala Thr Glu Val
 675 680 685

<210> 8
 <211> 1758
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(1758)
 <223> n = A,T,C or G

<400> 8

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 ctcgggaccc cacgtccccc ctgcaacgcc cgaggccctt gccccttctt cttcagggtc 180

 tgcctgaagc cccgagtc ccagggagcc accgagtccc tgcgcgcctt gggngcagca 240

 ctgagcacga gcgtcccggt ctatacggag caccggggag agtcagccgc tgccctgcgg 300

 ctgcctgtatg gcctcgatcg tgcgcgcctt cgcgtatgtt ggccgggcac ttctccctc 360

 gtcattgaaa cctggagaga gcagctggga gagcatgtg gagggcccg ctggAACCTG 420

 ctagcacgtg tggctggccg tagacgcctg gcgcgtgggg gcccgtggc cccgcgtatgt 480

 cagcgcacag gcacatggga gttgcacttc tcctaccgcg cgcgtgcga gcccggcc 540

 gtcggggccg cctgcgcgcg cctgtgcgc tcacgcgtg cccctcgcg gtgtggcccg 600

 ggactgcgac cctgcacgcc attcccgagac gagtgcaag ccccgctgt gtgtgcacca 660

 ggctgcagcc ccgagcacgg ctactgtgaa gagcctgtatg aatgcctgtt cctggaggcc 720

 tggactggac ccctctgcac ggtccctgtc tccaccagta gtcgcctgaa ctccagggtt 780

 cctggctctg ccagcactgg atgcctttta cctggccctg gaccttgta tggaaaccca 840

tgtgccaatg	ggggcagctg	tagtcaaacc	tctggctcct	ttgaatgtgc	ctgtccccgg	900
ggattctacg	ggcttcgatg	tgagggtgagc	ggggtcacgt	gcgcagatgg	accctgttc	960
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